TECHNICAL ASSISTANCE REQUEST
COLUMBUS CLOSURE PROJECT
CCP 02-07-3

SURFACE CHARACTERIZATION OF SOILS FOR FREE RELEASE

SECTION 1 -- APPROVALS FOR TECHNICAL ASSISTANCE

_____	_____
Contractor Site Representative	OST/HQ Program Manager
_____	_____
DOE Site Manager	OST/HQ Office Director
_____	
DOE OH Manager	

SECTION 2 -- BACKGROUND AND PROBLEM DESCRIPTION:
This Technical Assistance Team (TA) will be requested to focus on independently reviewing the approach in the current baseline for characterization and free release of soils located on the Battelle West Jefferson site. The site is located near a residential area and is currently used as an industrial site concurrently with the cleanup activities. The Battelle Columbus Laboratories Decommissioning Project (BCLDP) plans to free release all surface and subsurface soil on Battelle's 11-acre site. The BCLDP has performed the subsurface sampling and found the extent of contaminated soil to be relatively small. Preliminary characterization has been completed for most of the site using conventional means of physically sampling the surface and at various depths within gridded areas. In order to free release the site, this data must be combined with an accurate surface monitoring "walkover" and be presented, after an Independent Verification Contractor (IVC) review, to the NRC. The use of the Sub-Surface Multi-Spectral Contamination Monitor (SMCM), or comparable technology, is expected to accelerate and enhance the free release process.

The current BCLDP baseline technical approach combines physically sampling within gridded areas with conventional "walkover" technology. While conventional "walkover" technology is available to monitor areas of the 11-acre site, the radiation from the Transuranic (TRU) waste stored in building JN-1 will interfere with readings attempted over some areas of the site. Thus, the baseline approach requires waiting until the radiation source, the TRU waste, has been shipped off-site. An alternative would be to use a technology, such as the SMCM, which has been specifically designed to operate accurately within a radiation field.

Technical assistance is requested to provide expertise to enable deployment of the SMCM or alternate technology to expedite free release of the Battelle site. An early deployment of the SMCM or alternate proven technology would provide BCLDP with vital information for free release and closure of the site.

SECTION 3 -- SCOPE:
The purpose of this TA Team is to recommend improvements to the proposed baseline technologies for performing characterization "walkover" surveys to enable free release in compliance with regulatory limits. The Team will also be expected to identify opportunities for cost and schedule savings and risk reduction.

The Team will be provided with background information concerning the problems being addressed and the presently proposed technical solutions prior to arrival at the site. Upon arrival, the Team will be given the scope of the study and expectations of management. The contractor will provide a briefing on the current baseline technology for the characterization "wallkover" surveys and free release of the soil. The Team will tour the site with the contractor and have questions answered before the development of possible alternatives begins.

After the baseline briefing and tour, the team will determine if more effective alternatives are available to achieve the closure objectives with improved cost and schedule. While the BCLDP has a plan for the site characterization "walkover" surveys and free release, the team should independently develop and recommend any technologies or different technical approaches currently available which can improve the proposed approach both from an acceleration as well as regulatory compliance standpoint. In addition to reduction in risk, the alternatives proposed should offer improvements over the cost and schedule resulting from the baseline methodology.

SECTION 4 -- SCHEDULING REQUIREMENTS:
Consistent with the present site D&D schedule for free release of the soils at the Battelle site and the sequence of work, it will be helpful if the requested TA can be accomplished by September 2003.

SECTION 5 -- BENEFITS:
The primary benefits of the TA Team assistance is to improve the BCLDP plan by identifying better technologies and processes for the site characterization "walkover" and free release of soil. Specific areas to be addressed by the Team include reviewing the Baseline Revision 3 approach to site characterization "walkover" and free release followed by recommending improvements to reduce costs, shorten the schedule and assure site closure.

The cost estimate to complete this TA is about $50,000, and it is anticipated that a cost avoidance of approximately $200,000 or more should result from TA recommendations in one or more of the areas listed above.

SECTION 6 -- DELIVERABLES:
Any recommended alternatives will be developed to the extent possible and presented to DOE and Contractor management as a draft final report prior to leaving the site. It is anticipated that after completion of the final report, some portion of the team will be made available for consultation during characterization "walkover" surveys and free release of the soil. The consultation may range from phone calls to site visits either individually or as part of a team.